Sprint

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Via Electronic Submission

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
12th Street Lobby, TW-A325
Washington, D.C. 20554

Re: *Ex Parte* Presentation
ET Docket No. 00-258

Dear Ms. Dortch:

On Wednesday, September 1, 2004, Luisa Lancetti, Paul McCarthy, Harry Perlow and David Munson of Sprint Corporation ("Sprint") and Cecily Cohen of Nokia Inc. ("Nokia") had separate meetings with: 1)Bryan Tramont and Sheryl Wilkerson of Chairman Michael Powell's office; 2) Jennifer Manner of Commissioner Abernathy's office; 3) Paul Margie of Commissioner Copps's office; 4) Sam Feder of Commissioner Martin's office; and 5)Barry Ohlson of Commissioner Adelstein's office to discuss interference issues associated with a mobile wireless service operating in the spectrum located at 1915-1920 MHz and 1995-2000 MHz (the "H Block"). Recent testing performed by Nokia on Personal Communications Services ("PCS") handset models in use today demonstrates the susceptibility of PCS handsets to "overload" interference. The discussion tracked the attached presentation, copies of which were provided to participants in the meetings.

Sprint and Nokia explained that the susceptibility of existing PCS handsets to "overload" interference caused by an H Block device results from the inability of the PCS handsets' receive filters to sufficiently attenuate in-band H Block emissions. In short, the duplexers in millions of PCS handsets in use and being sold today do not filter out the H Block. Accordingly, the transmit filter characteristics of a prospective H Block mobile device are irrelevant to the overload interference it would cause to millions of PCS handsets in use and being sold today.

Among other things, the Nokia testing demonstrates the following points:

- The test shows the relationship between Frame Error Rates ("FER") experienced by a PCS handset and the H Block RF signal power (in dBm) present at the PCS antenna port.

We note that neither the testing nor the test results are based upon the distance of the H Block handset from the PCS handset – in fact, the test results can be extrapolated to any distance. To illustrate this point, the presentation showed that one of the handsets tested would incur a 90 percent FER from an H Block handset operating at 166 mW one meter away, but the FER impacts on PCS handsets can be calculated for distances further than one meter using the test data provided.

- Direct Conversion handsets employing SAW filters, which are widely deployed, with millions of handsets in the marketplace, would experience significant "overload" interference from H Block transmissions. Direct Conversion technology is widely used by handset manufacturers and present in Sprint CDMA 1x handsets, among other operators, and in various manufacturers' ongoing production cycles.

- When performing the same tests using C and G Block signals as the interfering sources, no "overload" interference was created.

- Attenuation and frequency variations are dramatic over the normal operating range of a duplexer in the handset – as the duplexer gets hotter, the performance degrades significantly.

- Higher operating temperatures result in less attenuation across the entire H Block.

- Although the Nokia tests were limited to the last H Block transmit channel and its impact upon the first A Block receive channel, the response in duplexer performance to temperature shifts suggests that the "overload" interference problem can be attributed to all H Block channels – not just the channel closest to the PCS A Block.

- Additional testing is required to confirm the scope of this problem, and Sprint and Nokia expressed willingness to work with the FCC on further testing and technical analyses concerning H Block interference issues.

In sum, overload (or "in-band") and out-of-band ("OOB") concerns are raised by a PCS-like service in the H Block. The test results confirm that if the H Block is allocated for mobile services, significant power limitations (likely throughout the H Block transmit band) must be imposed along with the OOB emissions criteria set forth in PCS industry standard, TIA 98-F, to avoid adverse impacts to PCS consumers.

Pursuant to Section 1.1206 of the Commission's Rules, this letter is being electronically filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

Luisa L. Lancetti

Attachment

cc: Bryan Tramont
Sheryl Wilkerson
Jennifer Manner
Paul Margie
Sam Feder
Barry Ohlson
John Muleta
Ed Thomas
Bruce Franca
Ahmed Lahjouji
Blaise Scinto
Brian Carter
Gary Thayer
Geraldine Matise
Martin Liebman
Mary Woytek
Nese Guendelsberger
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